

MATERIAL DATA SAFETY SHEET

OPTISIL - CALCINED KAOLIN

PAGE 1 OF 6

SAFETY DATA SHEET

12/10/2006
OPTISIL

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Optisil PS 20

Synonyms: Calcined kaolin, Anhydrous kaolin clay

Product use: Mineral pigment

Manufacturer:

YILLONG CHEMICAL GROUP LIMITED

Feilo Edifice Plaza, 6F/602, No 398, Yonghe Road, 200072, Zhabei District,
Shanghai, China

24 HOUR EMERGENCY RESPONSE NUMBER : +86-13588052122

For product information: +86-21-65266643

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Component(s) (chemical & common name(s)) CAS Registry No. % (Approx.)

Anhydrous aluminum silicate (Calcined kaolin) 66402-68-4 >99

Exposure Limits - See Section 8

SECTION 3 - HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Short-Term (acute):

Eye Contact: Direct contact with dust may cause irritation by mechanical abrasion.

Skin Contact:

Direct contact may cause irritation by mechanical abrasion.

Inhalation:

Dusts may irritate the nose, throat, and respiratory tract by mechanical abrasion. Coughing, sneezing, and shortness of breath may occur following exposures in excess of appropriate limits.

Ingestion:

Expected to be practically non-toxic. Ingestion of large amounts may cause gastrointestinal irritation and blockage.

Long-Term (chronic):

Calcined kaolin is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA).

Prolonged and repeated inhalation of respirable dust in excess of appropriate exposure limits has caused pneumoconiosis, a lung disease. Not all individuals with pneumoconiosis will exhibit symptoms (signs) of the disease. However, pneumoconiosis can be progressive and symptoms can appear at any time, even years after the exposure has ceased. Symptoms of pneumoconiosis may include but are not limited to the following: shortness of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume.

SECTION 4 - FIRST AID MEASURES

Eyes:

Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelid(s) open. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Contact a physician if irritation persists or later develops. Skin: Wash with soap and water. Contact a physician if irritation persists or later develops.

Ingestion:

If person is conscious, give large quantity of water and induce vomiting; however, never attempt to make an unconscious person drink or vomit. Get immediate medical attention.

Inhalation: R

Remove to fresh air. Dust in the throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or later develops.

SECTION 5 - FIRE FIGHTING MEASURES

Physical Hazard: Non-combustible
Flammable Limits In Air: Not flammable
Flashpoint: Not flammable
Autoignition Temperature: Not flammable
Extinguishing Agents: None required
Explosion Data: Non-explosive
Unusual Fire And Explosion Hazards: None known
Sensitivity to Static Discharge: Not applicable

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Care should be taken to avoid dusting while sweeping up spilled product. Cleanup personnel should use appropriate NIOSH/MSHA approved respirators if exposures are expected above the limits listed in Section 8. Water should be used with great care as it creates a slipping hazard when mixed with this product. This product is generally non-toxic to aquatic systems but may cause high turbidity in stormwater.

No components in this product are subject to the reporting requirements of Title III of SARA, 1986, and 40 CFR 372.

SECTION 7 - HANDLING AND STORAGE

Handling:

Appropriate personal protection should be used when handling (refer to Section 8). Use care when dispensing to avoid dust generation. Fold and flatten empty bags carefully to reduce dust generation.

Wash hands thoroughly after handling.

Storage:

Best if kept under dry conditions. Not generally affected by hot or cold storage

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

No exposure limits have been published for calcined kaolin products. We recommend using the limits published for kaolin (cas# 1332-58-7)

Exposure Limits: Value Limit Reference

Kaolin 2 mg/m³ (Respirable dust) TWA (8 hour) ACGIH TLV-A4* 1332-58-7

15 mg/m³ (Total dust) TWA (8 hour) OSHA PEL

5 mg/m³ (Respirable dust) TWA (8 hour) OSHA PEL

10 mg/m³ (Total dust) TWA (10 hour) NIOSH REL

5 mg/m³ (Respirable dust) TWA (10 hour) NIOSH REL

Notes- (-A4) This indicates that kaolin is "Not Classifiable as a Human Carcinogen" by ACGIH.

Engineering Controls:

Respirable dust levels should be monitored regularly. Dust levels in excess of appropriate exposure limits should be reduced by all feasible engineering controls, including (but not limited to) wet suppression, ventilation, process enclosure, and enclosed employee work stations.

Respiratory Protection:

For respirable dust levels that exceed or are likely to exceed and 8hr-TWA of 2 mg/m³, a NIOSH/MSHA approved HEPA filter respirator must be worn. Respirator use must comply with applicable MSHA or OSHA standards which include provisions for a user training program, respirator repair and cleaning, respirator fit testing and other requirements.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:

N/A (Solid) Specific Gravity (H₂O=1): 2.2- 2.6 depending on product

2

Vapor Pressure (mm Hg): No Vapor Melting Point: >1700° C

Vapor Density (Air=1): No

Vapor Appearance and Odor: Off-white dry powder

Solubility in Water: Insoluble pH in Water (20% solids suspension): 4.0- 6.3

SECTION 10 - STABILITY AND REACTIVITY

Stability: This product is stable under normal storage conditions.

Hazardous Polymerization: Will not occur under normal conditions.

Incompatibility With Other Materials: None known

Hazardous Decomposition Products: None known

SECTION 11 - TOXICOLOGICAL Information

Calcined kaolin is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). The American Conference of Governmental Industrial Hygienists (ACGIH) lists kaolin as- Not Classifiable as a Human Carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.

SECTION 12 - ECOLOGICAL INFORMATION

Ecological Information: No adverse ecological effects are expected. May affect turbidity of water if discharged in large quantities to lakes or streams.

SECTION 13 - DISPOSAL CONSIDERATIONS

Pickup and reuse clean materials, avoiding dusting situations. Dispose of waste materials only in accordance with applicable federal, state, and local laws and regulations. This product is not hazardous as a waste. Check with local landfills before disposing in trash. Dispose of in closed containers to avoid dusting.

SECTION 14 - TRANSPORTATION INFORMATION

DOT Hazard Classification: None

Placard Required: None

Label Required: Use original label including all warnings. When disposing of this material in its pure form use a DOT "Non-Hazardous Waste" label.

SECTION 15 - REGULATORY INFORMATION

Global Regulations:

Kaolin clay (CAS # 1332-58-7) can be found in the following registries: DSL (Canada), ENCS (Japan), ECL (Korea), AICS (Australia), SWISS (Swiss), PICCS (Philippines), HSNO (New Zealand), China. Kaolinite (CAS # 131874-7) can be found in the following registries: NDSL (Canada), EINECS (Europe), ECL (Korea).

R phrases: R36/37, R66 S phrases: S24/25, S37/39, S38

The German Ministry of the Environment considers this product not dangerous to water.

SECTION 16 - OTHER INFORMATION

MSDS Creation Date 12/10/2006
Revision #0 Date:
Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.